

# Annual Report 2003



## Gathering and Processing Sector

### Company Information

Company Name: \_\_\_\_\_

Gas STAR Contact: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

- ☐ BMP 1: Convert gas pneumatics to instrument air systems
- ☐ BMP 2: Install flash tank separators on glycol dehydrators
- ☐ BMP 3: Directed inspection and maintenance at gas plants and booster stations
- ☐ BMP 4: Partner Reported Opportunities (*Please specify*)

\_\_\_\_\_  
\_\_\_\_\_

Period covered by report: From: \_\_\_\_\_ To: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

\* In addition to reporting methane emissions reductions, you are welcome to include other information about your company's participation in Natural Gas STAR in the "Additional Program Accomplishments" section of this form. The Natural Gas STAR Program will use any information entered in this section to recognize the efforts and accomplishments of outstanding partners.



## Gathering and Processing Sector Annual Report

### BMP 1: Convert Gas Pneumatics to Instrument Air Systems

#### Current Year Activities

##### A. Facility summary:

Number of instrument air systems installed: \_\_\_\_\_ systems

Total number of high-bleed devices in systems converted to instrument air, if known: \_\_\_\_\_ devices

Total number of low-bleed devices in systems converted to instrument air, if known: \_\_\_\_\_ devices

Percentage of facilities using instrument air: \_\_\_\_\_ %

##### B. Cost summary:

Estimated cost of converting to instrument air (including equipment and labor): \$ \_\_\_\_\_ /replacement

C. Methane emissions reduction: \_\_\_\_\_ Mcf

Please identify the basis for the emissions reduction estimate, using the space provided to show any calculations

☐ Direct measurement  
Total volume of gas used per year prior to converting to instrument air:

☐ Other (Please specify)

☐ Standard calculation

Methane emissions reduction  
= [Average high-bleed device annual emissions (Mcf/yr)  
x Number of high-bleed devices converted to instrument air]  
+ [Average low-bleed device annual emissions (Mcf/yr)  
x Number of low-bleed devices converted to instrument air]

\*If annual emissions are not known, use default values of 138 Mcf/yr for high-bleed device emissions and 14 Mcf/yr for low-bleed device emissions

Please specify your data source:

- ☐ Field measurement  
☐ Manufacturer specifications

D. Total value of gas saved: \$ \_\_\_\_\_

Total value of gas saved  
= Methane emissions reduction (in Mcf)  
x Gas value (in \$/Mcf) [If not known, use default of \$3.00/Mcf]

E. How many instrument air replacements are planned for next year? \_\_\_\_\_ installations

#### Previous Years' Activities

Use the table below to report any past activities implemented, but not previously reported to the Natural Gas STAR Program

Year	# Units Replaced	Total Cost of Replacements (incl. equipment and labor) (\$)	Estimated Reductions (Mcf/yr)	Value of Gas Saved (\$)

**BMP 1 Comments:** Please use the back of the page for additional space if needed.



## Gathering and Processing Sector Annual Report

### BMP 2: Install Flash Tank Separators on Glycol Dehydrators

#### Current Year Activities

**A. Facility summary:**

Number of flash tank separators installed: \_\_\_\_\_ separators  
Percent of dehydrators in system equipped with flash tank separators: \_\_\_\_\_ %

**B. Cost summary:**

Estimated cost per flash tank separator installation (including equipment and labor): \$ \_\_\_\_\_ /installation

**C. Methane emissions reduction:** \_\_\_\_\_ Mcf

Please identify the basis for the emissions reduction estimate, using the space provided to show any calculations

☐ Standard calculation

Methane emissions reduction per flash tank installation  
= [TEG circulation rate (in gal/hr)  
x Methane entrainment rate (in scf/gal)\*  
x hours of operation (in hrs/yr)  
x 0.90] / 1,000

\*If methane entrainment rate is not known, use a default value of 3 scf/gal for energy exchange pumps or 1 scf/gal for electric pumps

Please specify your data source:

- ☐ Field measurement  
☐ Manufacturer specifications

☐ Calculation using default

Methane emissions reduction  
= [Average gas throughput (in MMcf/yr)  
x 170 scf/MMcf x 0.90] / 1,000

☐ Other (Please specify)**D. Total value of gas saved:** \$ \_\_\_\_\_

Total value of gas saved  
= Methane emissions reduction (in Mcf)  
x Gas value (in \$/Mcf) [If not known, use default of \$3.00/Mcf]

**E. How many flash tank separators do you plan to install next year?** \_\_\_\_\_ flash tanks

#### Previous Years' Activities

Use the table below to report any past activities implemented, but not previously reported to the Natural Gas STAR Program

Year	# Flash Tank Separators Installed	Total Cost of Installation (incl. equipment and labor) (\$)	Estimated Reductions (Mcf/yr)	Value of Gas Saved (\$)

**BMP 2 Comments:** Please use the back of the page for additional space if needed.



## Gathering and Processing Sector Annual Report

### BMP 3: Directed Inspection and Maintenance at Gas Plants and Booster Stations

#### Current Year Activities

**A. Facility summary:**

Number facilities surveyed: \_\_\_\_\_ facilities

Number of facilities with leaks found: \_\_\_\_\_ facilities

**B. Leak summary:**

Total number of leaks found: \_\_\_\_\_ leaks found

Total number of leaks repaired: \_\_\_\_\_ leaks repaired

**C. Cost summary:**

Total cost of surveys conducted: \$ \_\_\_\_\_

Total cost of leak repairs: \$ \_\_\_\_\_

**D. \*Methane emissions reduction:** \_\_\_\_\_ Mcf*Please identify the basis for the emissions reduction estimate provided, using the space provided to show any calculations*☐ Actual field measurement☐ Other (please specify)

\*Currently, no default value has been developed. If desired, you may estimate reductions across multiple facilities based on a similar facility.

**E. Total value of gas saved:**

\$ \_\_\_\_\_

*Total value of gas saved  
= Methane emissions reduction (in Mcf)  
x Gas value (in \$/Mcf) [If not known, use  
default of \$3.00/Mcf]*

**F. How many facilities do you  
plan to survey next year?**

\_\_\_\_\_ facilities

#### Previous Years' Activities

*Use the table below to report any past activities implemented, but not previously reported to the Natural Gas STAR Program*

Year	# Facilities Surveyed	Total Cost of Surveys (\$)	Total Cost of Repairs (\$)	Estimated Reductions (Mcf/yr)	Value of Gas Saved (\$)

**BMP 3 Comments:** *Please use the back of the page for additional space if needed.*



## Gathering and Processing Sector Annual Report

### BMP 4: Partner Reported Opportunities (PROs)

(For more details on PROs, visit [www.epa.gov/gasstar/pro/index.htm](http://www.epa.gov/gasstar/pro/index.htm))

#### Current Year Activities

**A. Activity description:** Please provide a separate PRO reporting form for each activity reported

Check one of the following:

- ☐ Install VRUs on atmospheric storage tanks at booster stations
- ☐ Replace seals on reciprocating compressors
- ☐ Reduce glycol circulation rates in dehydrators
- ☐ Replace wet compressor seals with dry seals
- ☐ Other (Please specify): \_\_\_\_\_

Please describe how your company implemented this practice/activity:

**B. Level of Implementation** (check one):

- ☐ Number of units installed: \_\_\_\_\_ units
- ☐ Frequency of practice: \_\_\_\_\_ times/year

**C. Are these emissions reductions** (check one):

- ☐ Continuing/ongoing
- ☐ One-time

**D. Methane emissions reduction:** \_\_\_\_\_ Mcf

**E. Cost summary:** Estimated cost of implementing this practice/activity (including equipment and labor): \$ \_\_\_\_\_

Please identify the basis for the emissions reduction estimate, using the space provided to show any calculations

- ☐ Actual field measurement
- ☐ Calculation using manufacturer specifications/other source
- ☐ Other (Please specify)

**F. Total value of gas saved:** \$ \_\_\_\_\_

Total value of gas saved  
= Methane emissions reduction (in Mcf)  
x Gas value (in \$/Mcf) [If not known, use default  
of \$3.00/Mcf]

**G. To what extent do you expect to implement this practice next year?**

#### Previous Years' Activities

Use the table below to report any past implementation of this PRO, but not previously reported to Natural Gas STAR

Year	Frequency of Practice/Activity or # of Installations	Total Cost of Practice/Activity (incl. equipment and labor) (\$)	Estimated Reductions (Mcf/yr)	Value of Gas Saved (\$)

**BMP 4 Comments/Additional Benefits:** Please describe any additional economic, operational, environmental, or safety benefits achieved by implementing this practice/activity. Use the back of the page for additional space if needed.



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## Gathering and Processing Sector Annual Report

### Additional Program Accomplishments

The Natural Gas STAR Program will use any information entered here to recognize the efforts and achievements of outstanding partners.

Please include any additional information you would like to share about your company's participation in Natural Gas STAR. Examples may include:

- Activities to strengthen your program (e.g., training/education, innovative technologies or activities, pilot projects, employee incentive programs).
- Efforts to communicate your participation and successes (e.g., internal newsletters, press releases, company Web site).
- Participation in Natural Gas STAR program activities (e.g., contributions to case studies, presentation at annual workshop).

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**Additional Accomplishments:**

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**Additional Accomplishments:** *Please use the back of the page for additional space if needed.*